Radio Shack
COLOR COMPUTER

T/S EDIT

For use with
Disk BASIC
or
OS-9 Operating System

Cat. No. 26-3264

TERMS AND CONDITIONS OF SALE AND LICENSE OF RADIO SHACK COMPUTER EQUIPMENT AND SOFTWARE PURCHASED FROM A RADIO SHACK COMPANY-OWNED COMPUTER CENTER, RETAIL STORE OR FROM A RADIO SHACK FRANCHISEE OR DEALER AT ITS AUTHORIZED LOCATION

LIMITED WARRANTY

I. CUSTOMER OBLIGATIONS

A. CUSTOMER assumes full responsibility that this Radio Shack computer hardware purchased (the "Equipment"), and any copies of Radio Shack software included with the Equipment or licensed separately (the "Software") meets the specifications, capacity, capabilities, versatility, and other requirements of CUSTOMER.

B. CUSTOMER assumes full responsibility for the condition and effectiveness of the operating environment in which the Equipment and Software are to function, and for its installation.

II. RADIO SHACK LIMITED WARRANTIES AND CONDITIONS OF SALE

A. For a period of ninety (90) calendar days from the date of the Radio Shack sales document received upon purchase of the Equipment, RADIO SHACK warrants to the original CUSTOMER that the Equipment and the medium upon which the Software is stored is free from manufacturing defects. THIS WARRANTY IS ONLY APPLICABLE TO PURCHASES OF RADIO SHACK EQUIPMENT BY THE ORIGINAL CUSTOMER FROM RADIO SHACK COMPANY-OWNED COMPUTER CENTERS, RETAIL STORES AND FROM RADIO SHACK FRANCHISEES AND DEALERS AT ITS AUTHORIZED LOCATION. The warranty is void if the Equipment's case or cabinet has been opened, or if the Equipment or Software has been subjected to improper or abnormal use. If a manufacturing defect is discovered during the stated warranty period, the defective Equipment must be returned to a Radio Shack Computer Center, a Radio Shack retail store, participating Radio Shack franchisee or Radio Shack dealer for repair, along with a copy of the sales document or lease agreement. The original CUSTOMER'S sole and exclusive remedy in the event of a defect is limited to the correction of the defect by repair, replacement, or refund of the purchase price, at RADIO SHACK'S election and sole expense. RADIO SHACK has no obligation to replace or repair expendable items.

B. RADIO SHACK makes no warranty as to the design, capability, capacity, or suitability for use of the Software, except as provided in this paragraph. Software is licensed on an "AS IS" basis, without warranty. The original CUSTOMER'S exclusive remedy, in the event of a Software manufacturing defect, is its repair or replacement within thirty (30) calendar days of the date of the Radio Shack sales document received upon license of the Software. The defective Software shall be returned to a Radio Shack Computer Center, a Radio Shack retail store, participating Radio Shack franchisee or Radio Shack dealer along with the sales document.

C. Except as provided herein no employee, agent, franchisee, dealer or other person is authorized to give any warranties of any nature on behalf of RADIO SHACK.

D. Except as provided herein, **RADIO SHACK MAKES NO WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

E. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation(s) may not apply to CUSTOMER.

III. LIMITATION OF LIABILITY

A. EXCEPT AS PROVIDED HEREIN, RADIO SHACK SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED OR ALLEGED TO BE CAUSED DIRECTLY OR INDIRECTLY BY "EQUIPMENT" OR "SOFTWARE" SOLD, LEASED, LICENSED OR FURNISHED BY RADIO SHACK, INCLUDING, BUT NOT LIMITED TO, ANY INTERRUPTION OF SERVICE, LOSS OF BUSINESS OR ANTICIPATORY PROFITS OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR OPERATION OF THE "EQUIPMENT" OR "SOFTWARE". IN NO EVENT SHALL RADIO SHACK BE LIABLE FOR LOSS OF PROFITS, OR ANY INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY BREACH OF THIS WARRANTY OR IN ANY MANNER ARISING OUT OF OR CONNECTED WITH THE SALE, LEASE, LICENSE, USE OR ANTICIPATED USE OF THE "EQUIPMENT" OR "SOFTWARE".

continued

NOTWITHSTANDING THE ABOVE LIMITATIONS AND WARRANTIES, RADIO SHACK'S LIABILITY HEREUNDER FOR DAMAGES INCURRED BY CUSTOMER OR OTHERS SHALL NOT EXCEED THE AMOUNT PAID BY CUSTOMER FOR THE PARTICULAR "EQUIPMENT" OR "SOFTWARE" INVOLVED.

B. RADIO SHACK shall not be liable for any damages caused by delay in delivering or furnishing Equipment and/or Software.

C. No action arising out of any claimed breach of this Warranty or transactions under this Warranty may be brought more than two (2) years after the cause of action has accrued or more than four (4) years after the date of the Radio Shack sales document for the Equipment or Software, whichever first occurs.

D. Some states do not allow the limitation or exclusion of incidental or consequential damages, so the above limitation(s) or exclusion(s) may not apply to CUSTOMER.

IV. RADIO SHACK SOFTWARE LICENSE

RADIO SHACK grants to CUSTOMER a non-exclusive, paid-up license to use the RADIO SHACK Software on **one** computer, subject to the following provisions:

A. Except as otherwise provided in this Software License, applicable copyright laws shall apply to the Software.

B. Title to the medium on which the Software is recorded (cassette and/or diskette) or stored (ROM) is transferred to CUSTOMER, but not title to the Software.

C. CUSTOMER may use Software on one host computer and access that Software through one or more terminals if the Software permits this function.

D. CUSTOMER shall not use, make, manufacture, or reproduce copies of Software except for use on **one** computer and as is specifically provided in this Software License. Customer is expressly prohibited from disassembling the Software.

E. CUSTOMER is permitted to make additional copies of the Software **only** for backup or archival purposes or if additional copies are required in the operation of **one** computer with the Software, but only to the extent the Software allows a backup copy to be made. However, for TRSDOS Software, CUSTOMER is permitted to make a limited number of additional copies for CUSTOMER'S own use.

F. CUSTOMER may resell or distribute unmodified copies of the Software provided CUSTOMER has purchased one copy of the Software for each one sold or distributed. The provisions of this Software License shall also be applicable to third parties receiving copies of the Software from CUSTOMER.

G. All copyright notices shall be retained on all copies of the Software.

V. APPLICABILITY OF WARRANTY

A. The terms and conditions of this Warranty are applicable as between RADIO SHACK and CUSTOMER to either a sale of the Equipment and/or Software License to CUSTOMER or to a transaction whereby RADIO SHACK sells or conveys such Equipment to a third party for lease to CUSTOMER.

B. The limitations of liability and Warranty provisions herein shall inure to the benefit of RADIO SHACK, the author, owner and/or licensor of the Software and any manufacturer of the Equipment sold by RADIO SHACK.

VI. STATE LAW RIGHTS

The warranties granted herein give the **original** CUSTOMER specific legal rights, and the **original** CUSTOMER may have other rights which vary from state to state.

T/S EDIT

Radio Shack®
A DIVISION OF TANDY CORPORATION
FORT WORTH, TEXAS 76102

10 9 8 7 6 5 4 3 2 1

Features

- Full-Screen Editing
- True Lowercase Letters
- Side Scrolling
- Variable Character Display Size
- Global Editing
- Multiple File Merging

Package Contents

The T/S EDIT Color Computer Program/Text Editor may be used with both Color Computer disk operating systems — Disk Basic and OS-9. This package contains an instruction manual and two diskettes. The diskette containing the Disk Basic version of T/S EDIT requires a minimum system of 32K RAM and 1 disk drive; the OS-9 diskette requires a Color Computer with the OS-9 operating system, 64K RAM, and one disk drive. T/S EDIT runs only on the Color Computer; it will **not** work if it is used on auxiliary terminals.

Before You Start . . . .

IMPORTANT For OS-9 Users

All OS-9 users with the 01.00.00 version of the OS-9 operating system must make the following patch before using T/S EDIT. (Users with versions 01.00.01 or later need not apply the patch.)

PATCHING WITH ONE DISK DRIVE

First, write protect the T/S EDIT diskette, and then make a backup of an OS-9 system diskette.

Insert your T/S EDIT diskette, and then reboot the system. The screen displays the copyright notice of the new version of OS-9 and the **OS9:** prompt.

Remove your T/S EDIT diskette from the drive, and then insert your backup OS-9 system diskette. At the **OS9:** prompt, type:

CHX /D0/CMDS (ENTER)

At the next **OS9:** prompt, type:

COBBLER /D0 (ENTER)

After 20 or 30 seconds, the following message appears on the screen:

WARNING - FILE(S) OR KERNEL
PRESENT ON TRACK 34 - THIS
TRACK NOT REWRITTEN

OS9:

At the prompt, type:

LOAD COPY (ENTER)

When the next **OS9:** prompt appears, you are ready to copy T/S EDIT onto the OS-9 system diskette. Remove the OS-9 diskette and insert T/S EDIT. Type:

COPY /D0/TSEDIT /D0/CMDS/TSEDIT
-S #30K (ENTER)

When the screen displays:

READY DESTINATION, HIT C TO CONTINUE:

swap the T/S EDIT and OS-9 system diskettes and press **C**.

The screen displays:

READY SOURCE, HIT C TO CONTINUE:

Since the T/S EDIT file is copied in one pass, press (ENTER) to return to the OS-9 shell.

Swap diskettes so that T/S EDIT is once again in the disk drive. At the **OS9:** prompt, type:

COPY /D0/TSPARS /D0/TSPARS -S #30K (ENTER)

The screen displays:

READY DESTINATION, HIT C TO CONTINUE:

Swap the T/S EDIT and OS-9 system diskettes and press **C**.

The screen displays:

READY SOURCE, HIT C TO CONTINUE:

Since the TSPARS file is copied in one pass, press (ENTER) to return to the OS-9 shell. The patch is now complete.

Delete the COPY program from memory by typing:

UNLINK COPY (ENTER)

and make as many backups of this OS-9 version of T/S EDIT as necessary.

PATCHING WITH TWO DISK DRIVES

First, write protect the T/S EDIT diskette,and then make a backup of an OS-9 system diskette.

Insert your T/S EDIT diskette in Drive 0, and then reboot the system. The screen displays the copyright notice of your new version of OS-9 and the **OS9:** prompt.

Remove the T/S EDIT diskette from Drive 0 and insert it in Drive 1. Insert your backup OS-9 system diskette in Drive 0, and type:

CHX /D0/CMDS (ENTER)

At the **OS9:** prompt, type:

COBBLER /D0 (ENTER)

After the **WARNING - FILES OR KERNEL . . .** message appears, type:

COPY /D1/TSEDIT /D0/CMDS/TSEDIT #30K (ENTER)

After the T/S EDIT file is copied, type:

COPY /D1/TSPARS /D0/TSPARS #30K (ENTER)

The patch is now complete.

Make as many backups of this OS-9 version of T/S EDIT as necessary.

Contents

Chapter 1 - T/S EDIT Startup 1

Chapter 2 - Cursor Movement 3

Chapter 3 - Inserting Text 7

Chapter 4 - Deleting Text 9

Chapter 5 - Changing Text 11

Chapter 6 - Yanking Text 13

Chapter 7 - File Control and Disk I/O Commands 15

Chapter 8 - Special Commands 19

Chapter 9 - Marking Areas of Text 23

Chapter 10 - Resetting User Parameters 25

APPENDIX - Keyboard Codes 29

APPENDIX - Glossary of T/S EDIT Commands 31

Chapter 1 - T/S EDIT Startup

First, make several backups of your T/S EDIT diskette. (OS-9 users should make backups *after* they complete the operating system patch described earlier in this manual.)

Since T/S EDIT is primarily a program editor, we use the following short BASIC program to demonstrate all its commands and capabilities. Type the following program into memory and SAVE it onto a T/S EDIT backup diskette by entering SAVE "SAMP/BAS",A. The **,A** detokenizes the BASIC commands in the program and saves them as ASCII characters that T/S EDIT can "read."

```
10 INPUT "TYPE YOUR NAME,
   THEN PRESS ENTER"; N$
20 FOR X = 1 TO 800: NEXT X
30 PRINT@ 320, N$
40 END
```

Note: When programs saved without the **,A** command are loaded into T/S EDIT, your screen displays reserved BASIC words as "garbage" characters, and the program cannot be edited properly. With OS-9 you can use the BASIC 09 edit mode to create the SAMP/BAS file.

Now, to boot up T/S EDIT, type:

RUN "TSEDIT" (ENTER)

With OS-9, type:

TSEDIT SAMP/BAS (ENTER)

When the T/S EDIT logo appears at the upper left portion of your screen, you are ready to begin editing. Your screen displays the following:

T/S EDIT
by Dale Lear

Enter Filename(s) to Edit:

Below the **Filename(s) to Edit:** prompt, type:

SAMP/BAS (ENTER)

Do not use quotation marks around the file you are loading. If you do, T/S EDIT interprets them as part of the filename and returns the following error message:

>> NOT FOUND - press break.

You may alter many T/S EDIT display and operation parameters (see the **Resetting User Parameters** section of this manual). However, you may change only two — Video Mode and Display Mode — while you are actually using the editor. You may change these modes at any time without affecting the program or text being edited.

The Color Mode setting controls the editor's background and text colors, and you may change it at any time by typing **vc**. You select one of four color options every time you press **vc**: black on white; white on black; black on green; and green on black. Each change remains in effect until you press **vc** again or exit T/S EDIT.

The Display Mode controls the size of the characters that appear on your screen — from a low-resolution screen of 32 characters per line by 16 lines to a high-resolution screen of 80 characters per line by 32 lines. You may change the Display Mode at any time by pressing **v** and a number from 0 to 9. (See the **Resetting User Parameters** section for a list of the 10 possible T/S EDIT display screens.)

Chapter 2 - Cursor Movement

To load your program into T/S EDIT, type:

SAMP/BAS (ENTER).

The flashing cursor at the top of the screen shows your current position on the display screen. You control cursor movement with the arrow keys on the right and left sides of your Color Computer keyboard. When you quickly press and release an arrow key, you move the cursor one space in the direction of the arrow. When you hold down the key for more than a second, you activate the T/S EDIT "repeat function" which rapidly moves the cursor in the indicated direction.

You may scroll quickly through many program lines with this up and down arrow repeat function. The left and right arrows, however, repeat only to the end of the line and do not "wrap" to the preceding or following lines.

Note: The OS-9 version of T/S EDIT does not support the repeat function.

A few more commands make cursor movement even faster:

(SHIFT) (←) moves the cursor to the beginning of the line
(SHIFT) (→) moves the cursor to the end of the line
g positions the cursor at the beginning of text
G positions the cursor at the end of text

Note: Most T/S EDIT commands use both shifted and unshifted letters for separate editing functions. The shifted **G** above, for example, is a totally different command from the unshifted **g**.

In addition to the frequently used commands listed above, T/S EDIT offers several more helpful cursor-positioning commands:

w moves the cursor forward one word
W moves the cursor forward one word bounded by white space

Move the cursor to the beginning of Line 10. Try both of the above commands. **W** stops on characters directly after white

spaces; **w** treats nonalphanumeric characters, such as quotation marks, commas, and so on, as separate "words."

Note: As with most other T/S EDIT commands, pressing the above keys for more than a second generates the "repeat function" and lets you move rapidly through text and program lines.

b moves the cursor to the beginning of a word
B moves the cursor to the beginning of a word bounded by white space
e moves the cursor to the end of a word
E moves the cursor to the end of a word bounded by white space
% toggles the cursor from one parenthesis to the matching parenthesis

The difference between **B** and **b** and **E** and **e** is simply the definition of "word." The shifted commands define "word" as "characters following a white space"; the unshifted commands recognize nonalphanumeric characters as delimiters between "words."

Note: The unshifted commands also treat a series of nonalphanumeric characters as a single "word". For example, if you use the **e** command to move through the sentence "TYPE NAME . . . PRESS ENTER", the cursor skips through the ellipsis (. . .) as though it were one word.

Two additional commands let you move rapidly through large programs by advancing an entire "page" at a time rather than by scrolling through individual lines.

SHIFT ↑ moves forward one page
SHIFT ↓ moves back one page

If you feel more comfortable typing with the letter keys than with the special arrow keys, you can use the following keys to perform the same functions as the arrow keys:

h moves the cursor left one character
j moves the cursor down one line
k moves the cursor up one line
l moves the cursor right one character
0 moves the cursor to the beginning of the line
$ moves the cursor to the end of the line

Like the arrow keys, the **h** and **l** commands do not "wrap" the cursor to the previous or follow lines.

Note: If you are in an uppercase-only mode (as when you first enter T/S EDIT without using (CTRL) Ø), the edit commands are displayed as uppercase letters for both shifted and unshifted commands. Using the (CTRL) Ø command causes T/S EDIT to display commands in their uppercase/lowercase styles respectively.

Chapter 3 - Inserting Text

The most important Insert command is **i**, which lets you insert any number of characters at the cursor position.

For example, to change the PRINT statement in the sample program to "TYPE YOUR *FULL* NAME, THEN PRESS ENTER", first move the cursor to the space following YOUR. Now type:

i

T/S EDIT breaks apart Line 10 and fills it with spaces to handle your insertions. Now type:

(SPACEBAR) FULL (BREAK)

The **(BREAK)** command deletes the blank spaces behind your insertion and exits Insert Mode.

> **Note:** After pressing **i** or any of the following insert command keys, T/S EDIT remains in Insert Mode until you press **(BREAK)**. Since T/S EDIT uses **(BREAK)** to escape from Insert Mode, you cannot use **(BREAK)** from within the editor as a keyboard interrupt.

T/S EDIT has five additional specialized Insert commands:

I inserts at the beginning of the current line
a inserts directly after the cursor
A inserts at the end of the line
O inserts after the end of the line
o inserts before the current line

The **A** and **I** commands treat inserts as a continuation of the current program line; you use the **o** and **O** commands to write new program lines. For example, to add a Line 25 to SAMP/BAS, move the cursor to any position in Line 20; press **o** and then add the new line. To *add* to the end of Line 20, however, press **A** and then type your insertion.

Chapter 4 - Deleting Text

Because of T/S EDIT's wide range of specialized Delete commands, you can remove huge blocks of program lines as easily as you can remove a single character. The most frequently used delete commands are:

x deletes the character at the cursor
*(n)***x** deletes *(n)* number of characters (1-9)
dd deletes the entire line
*n***dd** deletes *(n)* number of lines (1-9)
dt*(x)* deletes to character *(x)*

To delete a single character, position the cursor over the character and type **x**. To delete 2 to 9 consecutive letters, type a number and then **x**.

If you move the cursor to any character in a line and type **dd**, you delete the entire line, regardless of how many characters are to the right or left of the cursor. To delete 2 to 9 lines, type a number and **dd**.

> **Note:** You activate the T/S EDIT "repeat function" when you press a key for more than a second. If you hold down the **d** key too long, you may erase several program lines. Always use quick, firm keystrokes when entering Delete commands.

The **d**elete **t**o (character) command is useful for removing a section of a program line while keeping the rest of the line intact. For example, to change the PRINT statement in Line 10 to read "TYPE YOUR NAME", move the cursor to the comma after NAME and type **dt"** (delete to the character " " ").

> **Note:** After the deletion, the program line is automatically closed and shifted to the left.

Other specialized Delete commands are:

D deletes the remainder of the line
X deletes the character before the cursor
dw deletes a word (delimited by a non-alphanumeric character)
dW deletes a word (delimited by a space)
*(n)***dw** deletes (n) number of words (1-9) (delimited by a

non-alphanumeric character)

*(n)***dW** deletes (n) number of words (1-9) (delimited by a space)

dm deletes a specified "marked area" (see the **Special Commands** section.

D deletes the character under the cursor and everything else to the end of the *display* line. It does not, however, delete the entire *program* line if the program line wraps to the next display line. For example, if you move the cursor to a character in Line 10 of the sample program and press **D**, you delete the rest of the display line but not the "ER"; N$" of the program line. (Assuming that line 10 is the same as shown in the example on page 1.)

The Delete Word commands — **dw**, **dW**, *(n)***dw**, and *(n)***dW** — are similar to the **w** and **W** cursor movement commands. The unshifted **dw** deletes a "word" composed of letters and numbers bounded by any non-alphanumeric character (comma, space, quotation mark, and so on). The shifted **dW** command deletes all characters to the first space following the cursor.

Chapter 5 - Changing Text

When you want to change your program or text without making major insertions or deletions, T/S EDIT lets you replace characters, words, or lines in one simple step.

With the **r** command you can replace a single character with any other character. For example, to change the name of the input string in the sample program from N$ to T$, position the cursor over the N and type:

r T.

Note: The **r** command is the only T/S EDIT Change command from which you can exit without using (**BREAK**). When you press **r**, T/S EDIT lets you change only one character. When you use any of the following Change Commands, however, you can change multiple characters, and you must use (**BREAK**) to signal that you have completed your changes.

Unlike **r**, the **R** command lets you replace several consecutive characters. To change the PRINT @ location in Line 30 of the sample program, move the cursor to the first number after PRINT @ and press **R**. Type in the new screen location, and then press (**BREAK**).

The remaining Change Commands combine two functions into one step — they delete text and then automatically put T/S EDIT into Insert Mode. Since they are essentially "delete-then-insert" commands, they use exactly the same format as the Delete Commands in the preceding chapter.

ct*(x)* allows changes from the cursor to character *(x)*
C allows changes from the cursor to the end of the display line
cc allows a change of the entire line
*(n)***cc** allows the change of *(n)* number of lines (1-9)
cw allows the change of one word, delimited by a nonalphanumeric character
cW allows the change of one word, delimited by a blank space
*(n)***cw** allows the change of *(n)* number of words (1-9), delimited by a nonalphanumeric character

*(n)***cW** allows the change of *(n)* number of words (1-9), delimited by a blank space

cm allows changes in a specified ''marked area'' (see the **Special Commands** section).

Chapter 6 - "Yanking" Text

You use T/S EDIT's "yank" commands to copy words, lines, and other blocks of text without deleting the original text. A yank stores a copy of a section of text in the buffer until you "put" it somewhere else with a **p** command. (See the **Special Commands** section for instructions on using the **p**ut command.)

For example, to use the loop in Line 20 several times throughout the program, "yank" it each time you need it. Yank commands never delete text, they merely copy the text to a new location.

Yank commands follow the same format — and are used the same way — as Delete and Change commands:

yw yanks a word, delimited by a nonalphanumeric character
*(n)***yw** yanks *(n)* number of words (1-9), delimited by a nonalphanumeric character
yW yanks a word, delimited by a blank space
*(n)***yW** yanks *(n)* number of words (1-9), delimited by a blank space
yy yanks the entire line
*(n)***yy** yanks *(n)* number of lines (1-9)
Y yanks the remainder of the line
yt*(x)* yanks to the character *(x)*

Chapter 7 - File Control and DISK I/O Commands

After you edit a program or text file, T/S EDIT lets you save the corrected version onto a diskette in one of two ways.

Type:

:w (ENTER)

to write out the edited file with its original filename.

Type:

:w (SPACE) *filename* (ENTER)

to write out the edited file with a newly assigned filename.

Note: A colon (:) must precede all File Control and Disk Input/Output Commands, and (ENTER) must end all commands. When you type the colon, a **:** appears at the lower left-hand corner of your screen. Entering an invalid I/O command after a colon results in an >>**UNKNOWN COMMAND**<< error and returns you to the Edit Mode.

To save your edited SAMP/BAS file onto a diskette, type:

:w (ENTER).

T/S EDIT overwrites your original SAMP/BAS with a corrected version of the same name.

If, for some reason, you do not want to overwrite an original file, save the edited version under a different filename. For example, to save the sample program on the diskette under the filename of TEST/TXT, type:

:w TEST (ENTER)

Note: Files written out without extensions are automatically assigned the TXT extension in the directory listing. The Disk BASIC version of T/S EDIT automatically truncates a filename to 8 characters if it is more than 8 characters long.

You now have saved the same file on diskette under two different filenames — SAMP/BAS and TEST/TXT. To check the disk directory, first exit T/S EDIT. To "quit" the editor and return to Disk BASIC, type **:q**.

> **Note:** In the OS-9 version of T/S EDIT, you don't have to exit the editor to check the disk directory. Instead, you may issue a "shell" command by typing **:$**. This shell command invokes OS-9 so that any command that follows is interpreted as an OS-9 command. For example, you would check the disk directory by entering **:$** (SPACE) DIR (ENTER). The shell command calls OS-9 which then executes the DIR command. After reviewing the directory, you may return to T/S EDIT by pressing the spacebar in response to the **(HIT SPACE TO CONTINUE)** prompt at the bottom of the display screen.

You can edit more than one program or text file in a single session, T/S EDIT lets you store several filenames at the initial filename prompt, and then call them later on from within the editor.

Restart T/S EDIT. This time, however, in response to the **"Enter Filename(s) to Edit:"** prompt, type:

SAMP/BAS,TEST/TXT (ENTER)

or

SAMP/BAS TEST/TXT (ENTER).

> **Note:** You may use either commas or blank spaces as filename delimiters when several files are loaded at the initial T/S EDIT prompt.

The editor automatically loads SAMP/BAS and flashes the current filename at the lower left corner of your screen.

Make a few random inserts and deletions and write out the file with its original name by entering **:w**.

Now type **:n**. If you've made any changes in the file and have not saved them, the prompt **(NOT SAVED! . . .ARE YOU SURE?)** appears at the bottom of the screen. Type **N** to return to the edit mode; **Y** to continue loading the new file.

Note: The **(NOT SAVED! . . .ARE YOU SURE?)** prompt appears after you enter any Input/Output command that ends the editing of the current file. Those commands are: **:q**; **:n**; and **:e**.

The **:n** command loads the next file (specified at the initial prompt) to be edited. In this case, **TEST/TXT** flashes at the lower left of the screen as the file is loaded into T/S EDIT.

Note: The **:n** command deletes the current file when it loads the next file. Always be sure to save an edited file before using the **:n** (next) command. **Failure to do so results in the loss of all your current file changes.**

You may only use the **:n** command to call files the filenames which were stored at the initial T/S EDIT Filename prompt. To load a file that wasn't specified earlier, use the **:e** *filename* command. This command, like the one above, deletes the current file as it loads the new file. **Be sure to save the current edited file with a** :w **or** :w ***filename*** **command before using** :e **to load a new file to be edited.**

Note: If you use the **:e** command without a filename, the last file entered is reloaded into the editor.

T/S EDIT also lets you merge and edit two or more files at the same time. The **:r** *filename* command reads in a specified file at the cursor position. For example, if you have **TEST/TXT** on your screen, you may add **SAMP/BAS** to it by moving the cursor to any position on the screen and typing:

:r (SPACE) SAMP/BAS.

SAMP/BAS is loaded at the cursor without deleting the present file so that you may edit and save both files together.

If you ever forget the name of the file you currently are editing, type **:f**. This command displays the name of the last file loaded into T/S EDIT at the lower left corner of the display screen.

If, while editing two or more files, you wish to rename the merged program while it is still in the editor, simply type **:f (SPACE)** and the new filename. When you eventually write out the finished program with a **:w**, it will be saved under the new filename.

T/S EDIT lets you print the text buffer at any time by pressing **:p**. If, however, you don't have the printer hooked up or turned on, the Color Computer's keyboard locks and you lose the cursor. To recover from this error without losing your file, press (SHIFT) and (BREAK) simultaneously.

Note: The (SHIFT) (BREAK) key sequence is not implemented under OS-9.

Chapter 8 - Special Commands

T/S EDIT offers several powerful, time-saving commands that make the most tedious editing tasks as simple as typing a few characters.

One of the handiest T/S EDIT commands is **u**. **u** has the power to "undo" the last change — no matter how disastrous it may seem. Make any *single* change in the program on your screen. Now press **u**. The original text returns and the "correction" disappears. In this manner, even the direst of errors may be rectified — **but remember, the u command undoes only on the last change.**

> **Note:** Each time you press **u**, you toggle the last change on and off. The **u** command recovers the last change only until you reenter Insert Mode or make another change.

Another command that involves the last change is period (.). **Period** repeats the last change. If you press **x** to delete the character under the cursor and then press the period, another **x** command is executed.

> **Note:** Pressing **period** repeats the last single letter editing command until the command is changed.

T/S EDIT's "search and replace" routine is a model of simplicity and power. Using this function, you can find (or find and replace) any character or string of characters in a file.

The formats for "search and replace" operations are:

/xxx searches for the first occurrence of *xxx*
/xxx/yyy searches for the first occurrence of *xxx* and replaces it with *yyy*
*/xxx/yyy/***g** replaces all occurrences of *xxx* with *yyy*

> **Note:** To include a (RETURN) or a slash (/) or a reverse slash (\) in a search and replace string, precede the character with a reverse slash \. For example, to replace every colon in a program with a carriage return, you would type **/:/ \(ENTER)/g**.

To find the first occurrence of N$ in the sample program, type:

/N$ (ENTER)

The cursor moves to the N at the end of Line 10. To continue the search, type **n**, and the cursor moves to the next occurrence in Line 30.

To change the name of the variable N$ to NAME$, type:

/N$/NAME$ (ENTER)

The N$ at the end of Line 10 now reads NAME$. To continue the search-and-replace operation, type **n**. The cursor moves to Line 30, where the next N$ changes to NAME$.

To do a global change of all occurrences of N$, add a **/g** at the end of the above search-and-replace command. It then reads **/N$/NAME$/g**. The correction is made throughout the program.

Another powerful editing command is the **p** command, which puts all text of the *last* delete or yank on the line following the cursor. (A shifted **P** places the text directly *at* the cursor.) The put command lets you move words, lines, and blocks of text from one section of a document or program to another.

> **Note:** The **p** command restores only the last delete or yank. You must use it immediately after a delete or yank, or you cannot retrieve the text. With a single character operation, the **p** command puts the character immediately after the current cursor position.

To move Line 20 in SAMP/BAS to the end of the program, first move the cursor to any character in Line 20 and type **dd**. This deletes the line from the screen and stores it in a buffer. Next, move the cursor to any character in Line 40 and press **p**. This retrieves Line 20 from the buffer and places it at the end of the program. (If you yanked the line with a **yy**, two Line 20s appear on the screen after the "put".)

In the above example, a shifted **P** command places Line 20 directly at the cursor in Line 40.

Another special T/S EDIT command lets you convert uppercase letters into lowercase letters (or vice versa) without retyping each character. This shift/unshift command is the *tilde* (~), or (CTRL) **3**, and is especially effective when used with T/S EDIT's "repeat function." For example, move the cursor to the beginning of the text and simultaneously press (CTRL)

and **3**. If you hold the keys down, T/S EDIT converts every letter in the program into a lowercase character.

T/S EDIT's **J** command is especially helpful because it joins display lines with a single keystroke. With your original SAMP/BAS program on the screen, move the cursor to any character in Line 20 and type **J**. The display line is completely filled with characters from the following line.

> **Note:** The **J** command fills the *display* line with as many characters of the following line as possible. When the Display Mode is set at 80 columns, 80 characters can be put on a display line, and all of line 30 is moved up. If the Display Mode is set at 32 columns, however, only a few characters from line 30 will move up to line 20.

T/S EDIT's (CTRL) **0** command reverses the function of (SHIFT) on the keyboard. In the mode best suited for program editing, the keyboard generates capital letters, and the (SHIFT) produces lowercase letters. In the other (text-editing) mode, the keyboard generates lowercase letters, and the (SHIFT) produces capital letters.

> **Note:** The (CTRL) key is the (CLEAR) key on your Color Computer's keyboard. The (CTRL) **0** command toggles only alphabetic keys — not numeric or special character keys. (CTRL) **0** also does not affect T/S EDIT commands — shifted and unshifted commands are the same in both modes. When you first enter T/S EDIT (Disk BASIC), you are in an uppercase-only mode. Both shifted and unshifted letters are displayed only in uppercase. Once you use (CTRL) **0**, you can then have letters displayed in uppercase and lowercase fonts.

One final special command lets you see exactly how much of the text buffer your file is using. Pressing **?**, displays both the size of the current file (in characters) and remaining free buffer space at the bottom of your screen.

Chapter 9 - "Marking" Areas of Text

T/S EDIT offers a series of commands that let you "mark" the beginning and end of a section of text, and then move, change, or delete all text within that marked area.

The following six commands mark and manipulate blocks of text or program lines:

mb marks the beginning of a defined section
me marks the end of a defined section
mm moves the marked area to the current cursor position and deletes the original marked location
mP puts a copy of the marked area at the current cursor position but leaves the marked area in its original location
cm allows changes within the marked area
dm deletes the entire marked area

Pressing **mb** marks the beginning of a "marked area" and includes the character or space above the cursor. The **me** command, however, does *not* include the character above the cursor as part of the marked area. For example, to mark an area in SAMP/BAS that includes Lines 10 and 20, press **mb** while the cursor is under the 1 in 10 and **me** while the cursor is under the 3 in 30. (The **me** command excludes the 3 from the marked area, but includes the carriage return from Line 20.)

To move the above marked area to a new position between lines 30 and 40, move the cursor to the 4 in 40 and type **mm**.

> **Note:** Pressing **u** undoes moves, puts, changes and deletes but doesn't unmark an area. Areas are "marked" until an operation is completed or another area is marked with **mb** and **me** commands.

Undo the move in the above example by pressing **u**, then position the cursor under the 4 in Line 40. Type **mP**. As with the **mm** command, the marked area is inserted between Lines 30 and 40. However, the **mP** command doesn't delete the original Lines 10 and 20 and works like the Yank commands.

The last two commands for manipulating marked areas are quite similar: **dm** deletes the entire marked area, **cm** deletes the marked area and automatically switches to Insert Mode to accept changes.

Chapter 10 - Resetting User Parameters

The Disk BASIC user has control over the following T/S EDIT parameters:

Color Mode
Display Mode
Shift Lock
Editor Mode
Tab Mode
Tab Stop
Printer Baud Rate

You may change the Disk BASIC default settings for any of the above parameters by altering the T/S EDIT "Startup" program as you would any other BASIC program.

Note: The OS-9 version of T/S EDIT stores the user parameters in an ASCII file called TSPARS in the user directory. To change OS-9 default settings, see the instructions at the end of this section.

First, LOAD T/S EDIT. Then change the program lines to reflect the new default options you wish and type RUN. Listed below are all the user-controlled options available in T/S EDIT and the line numbers that you must change.

Note: Default changes you make in the startup program remain in effect until you change them or exit T/S EDIT. To change default settings "permanently," be sure your T/S EDIT disk is not write-protected, make the appropriate line changes, and then SAVE "STARTUP".

The **Color Mode** setting determines the color of the background and text. The options are:

VM = 0	Black on white
VM = 1	White on black
VM = 2	Black on green
VM = 3	Green on black

Default: VM = 0 (To reset, type 210 VM = *new default #*.)

The **Display Mode** controls the size of the characters as they are displayed on the CRT — from a low-resolution screen of 32 characters per line by 16 lines to a high-resolution screen of 80 characters per line by 32 lines.

DM = Ø	32 * 16 (low-resolution)
DM = 1	32 * 16 (low-resolution) virtual 80-column with horizontal scrolling
DM = 2	32 * 16
DM = 3	32 * 16 virtual 80-column with horizontal scrolling
DM = 4	40 * 24
DM = 5	50 * 24
DM = 6	60 * 24
DM = 7	60 * 32
DM = 8	80 * 24
DM = 9	80 * 32

Default: DM = 4 (To reset, type 340 DM = *new default #*.)

The **Shift Lock** setting lets you enter either all capital letters or capitals and lowercase letters. The options are:

SH = Ø	Upper and lowercase
SH = 1	Capitals only

Default: SH = 1 (To reset, type 400 SH = *new default #*.)

The **Edit Mode** parameter lets you use T/S EDIT as a limited text editor. The Text Mode selection initiates a "word wrap" feature and marks all carriage returns with a special "arrow" character.

EM = Ø	Program mode
EM = 1	Text mode

Default: EM = Ø (To reset, type 460 EM = *new default #*.)

The **Tab Mode** setting lets you use either blanks or a tab character when doing tabular inserts.

TM = Ø	Tab character inserted
TM = 1	Blanks inserted

Default: TM = 1 (To reset, type 510 TM = *new default #*.)

The **Tab Stop** parameter lets you set one of four possible tab settings:

TB = 1	One space tab stop
TB = 2	Two space tab stop
TB = 4	Four space tab stop
TB = 8	Eight space tab stop

Default: TB = 4 (To reset, type 580 TB = *new default #*.)

The **Printer Baud Rate** setting lets you tailor T/S EDIT to match the output rate of your printer. (Radio Shack printers normally have a Baud Rate of 600.)

BD = *(your printer's baud rate)*

Default: BD = 600 (To reset, type 630 BD = *new default #*.)

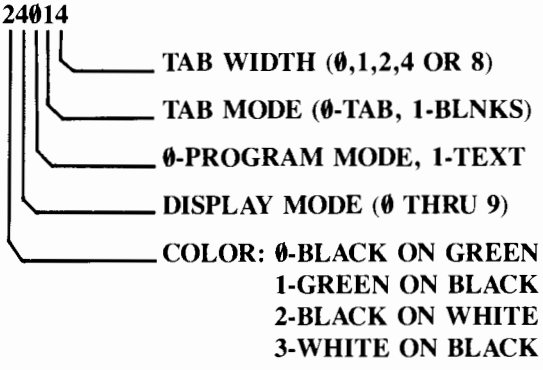
To reset the user parameters of the OS-9 version of T/S EDIT, you must change the TSPARS file. To enter TSPARS from the initial OS-9 shell type:

TSEDIT TSPARS

To enter TSPARS from within T/S EDIT, type:

:e TSPARS

Your display shows the following screen:



The numbers at the upper left corner of the screen are the T/S EDIT default settings. To trace each number to the parameter it controls, follow the lines to the appropriate setting. The number sets the parameter on that line. For example, the first number (2) sets the Color parameter, the next number (4) sets the Display Mode, and so on.

To reset the defaults, change the numbers at the upper left corner of the screen to correspond to your new parameter settings. For example, to change the default from Program to Text Mode, move the cursor to the third number (0) and then press 1. Change the other OS-9 parameters the same way.

Note: You may change the Color and Display Modes at any time during actual editing operations in either Disk BASIC or OS-9. To change the video background and text colors, type **vc**. To change the Display Mode, type **v** then a number from 0 to 9 that corresponds to the the Display Mode parameters listed above.

APPENDIX

Keyboard Codes

NORM	SHFT	CTRL	NORM	SHFT	CTRL
0	0				
1	!		F	f	ACK
2	"		G	g	BEL
3	#		H	h	BSP
4	$		I	i	HT
5	%		J	j	LF
6	&		K	k	VT
7	'	^	L	l	FF
8	(	[	M	m	DR
9	)	]	N	n	CO
:	*		O	o	CI
;	+		P	p	DLE
,	<	{	Q	q	DC1
-	=		R	r	DC2
.	>	}	S	s	DC3
/	?	\	T	t	DC4
@		NUL	U	u	NAK
A	a	SOH	V	v	SYN
B	b	STX	W	w	ETB
C	c	ETX	X	x	CAN
D	d	EOT	Y	y	EM
E	e	EMD	Z	z	SUM

Note: The (CTRL) key is the (CLEAR) key on the Color Computer's keyboard.

Glossary of T/S EDIT Commands

SHIFT ↑	—	moves cursor up one screen page
SHIFT ↓	—	moves cursor down one screen page
SHIFT →	—	($) moves cursor to the end of the line
SHIFT ←	—	(0) moves cursor to beginning of the line
↑ (k)	—	moves cursor up one line
↓ (j)	—	moves cursor down one line
→ (l)	—	moves cursor right one character
← (h)	—	moves cursor left one character

---

g	—	positions the cursor to the beginning of the text
G	—	positions the cursor to the end of the text
w	—	moves the cursor forward one word
W	—	moves the cursor forward one word bounded by white space
b	—	moves the cursor to the beginning of a word
B	—	moves the cursor to the beginning of a word bounded by white space
e	—	moves cursor to the end of a word
E	—	moves the cursor to the end of a word bounded by white space
%	—	toggles the cursor from one parenthesis to the matching parenthesis

---

i	—	enter insert text mode at the current cursor location
I	—	enter insert text mode at the beginning of the current line
a	—	insert text directly after the current cursor position
A	—	insert text at the end of the current line
O	—	insert text after the end of the current line
o	—	insert text before the current line
BREAK	—	exit or stop the insert mode at current cursor location

---

x	—	deletes a character at the present cursor position

(n)x	—	deletes (n) number of characters (1-9)
dd	—	delete the entire line
(n)dd	—	delete (n) number of lines (1-9)
dt(x)	—	delete to character (x)
D	—	deletes the remainder of the line
X	—	deletes the character before the cursor position
dw	—	deletes a word
dW	—	deletes a word bounded by white space
(n)dw	—	deletes (n) number of words (1-9)
(n)dW	—	deletes (n) number of words bounded by white space
dm	—	deletes a specified "marked" area
ct(x)	—	allows changes from the cursor to the character (x)
C	—	allows changes from the cursor to the end of the line
cc	—	allows a change of the entire line
(n)cc	—	allows changes of (n) number of lines
cw	—	change one word
cW	—	change one word bounded by white space
(n)cw	—	change (n) number of words
(n)cW	—	change (n) number of words bounded by white space
cm	—	allows changes to specified "marked" area
yw	—	yanks a word
(n)yw	—	yanks (n) number of words (1-9)
yW	—	yanks a word bounded by white space
(n)yW	—	yanks (n) number of words bounded by white space (1-9)
yy	—	yanks an entire line
(n)yy	—	yanks (n) number of lines (1-9)
Y	—	yanks remainder of line
yt(x)	—	yanks to the character (x)
:w	—	write out edit buffer using the original filename
:w filename	—	write out edit buffer using the new filename
:q	—	exit or quit the TSEDIT program

:$ command — OS9 only — execute OS9 shell command

:n — exit and load next file from file list for editing

:e filename — load for editing a file that wasn't previously specified

:r filename — reads in the file and inserts it into the edit buffer starting at the current cursor position

:f — display the current in work filename

:p — output to the printer device the current edit buffer

. — (period) repeat the last single character command

u — undo the last immediate single change

/xxx — searches for the first occurrence of xxx

/xxx/yyy/ — searches for xxx and replaces it with yyy

/xxx/yyy/g — replace all occurrences of xxx with yyy

CTRL 3 — or tilde — convert an uppercase letter to a lowercase letter or vice-versa at the current cursor position

CTRL 0 — reverses the SHIFT key function

p — puts all the text of the last delete or yank on the line following the cursor

P — places the text directly at the current cursor location

J — joins or fills the current display line with the next following line

---

mb — marks the beginning of a defined section

me — marks the end of a defined section

mm — moves the ''marked'' section to the current cursor position

mP — puts or copies the ''marked'' area to the current cursor position

vc — determines the color of the background and text being displayed

v(n) — determines which screen mode is to be displayed and used from 16 x 32 to 32 x 80 (0-9)

RADIO SHACK, A DIVISION OF TANDY CORPORATION

U.S.A.: FORT WORTH, TEXAS 76102
CANADA: BARRIE, ONTARIO L4M 4W5

TANDY CORPORATION

AUSTRALIA	BELGIUM	U. K.
91 KURRAJONG ROAD MOUNT DRUITT, N.S.W. 2770	PARC INDUSTRIEL DE NANINNE 5140 NANINNE	BILSTON ROAD WEDNESBURY WEST MIDLANDS WS10 7JN

7/84 MP

Printed in U.S.A.